

**LLANFYLLIN
RURAL DISTRICT COUNCIL.**

ANNUAL REPORT

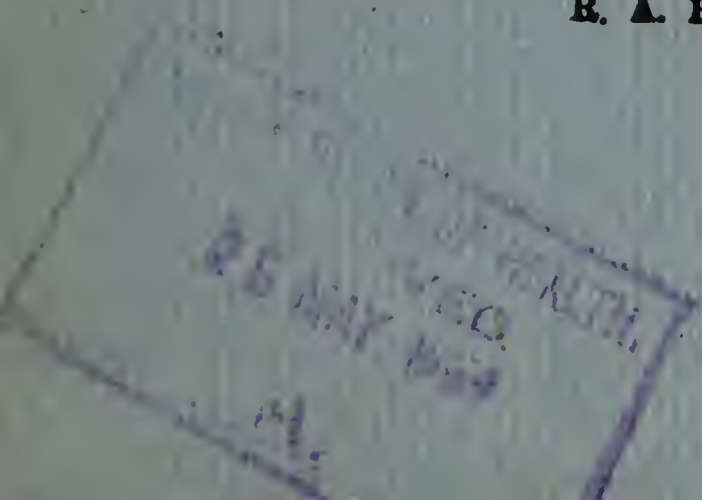
OF THE

Medical Officer of Health

FOR THE

YEAR 1957.

R. A. Bryan, Printer, Llanfyllin.



ANNUAL REPORT

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Medical Officer of Health

FOR THE

YEAR 1957.

Chairman : Mr. D. E. Roberts, J.P.

Parish :

Carreghofa
Guilsfield (Without)

Garthbeibio

Hirnant

Llandrinio

Llandysilio

Llanerfyl

Llanfair Caereinion

Llanfechain

Llanfihangel

Llangadfan

Llangyniew

Llangynog

Llanrhaeadr (Mont)

Llansantffraid (Pool)

Llansantffraid (Deytheur)

Llanwddyn

Meifod

Pennant

Members :

R. W. Lewis

J. T. Jones, J.P., J. T. Thomas,
Ll. Stafford Jones

Richard Lewis

D. E. Roberts, J.P.

E. Pickstock

F. R. Thomas

E. H. Mills

J. E. Moon, J. E. Hughes, I. R. Roberts

Rev. D. J. C. Jones

J. F. Jones

Mrs. G. M. Humphreys

T. P. Hughes

Trevor Jones

Simeon Jones

D. J. Bridge

Glyn Owen

T. O. Rickett

R. N. Jones, E. E. Chapman

G. J. Owen, J.P.

Clerk : Glyn Jones

**Chairman of Health and General Purposes
Committee :**

J. TREVOR JONES, J. P.

Medical Officer of Health :

I. B. MILLAR, M.D., B.Ch., B.A.O., D.P.H.,

Surveyor and Chief Public Health Inspector :

LL. O. EVANS, Cert. S.I.B., Cert. R.S.I., (Meat and other Foods)

Additional Public Health Inspectors

GEORGE E. WOODS, Cert. S.I.B., Cert. R.S.I.,
(Meat and other Foods)

D. J. A. HUMPHREYS, Cert. S.I.B., Cert. R.S.I.,
(Meat and other Foods)

*To the Chairman and Members of the Llanfyllin Rural
District Council.*

Mr. Chairman and Councillors,

It gives me pleasure to submit my Annual Report for the year 1957 which has been drawn up in accordance with the instructions contained in the Welsh Board of Health Circular No. 1/1958 (Wales).

The Statistics show average rates for the District in 1957 and these are satisfactory but for one item. Despite an excess of births over deaths the population continues to dwindle by means of migration. There can be little doubt that this trend will persist unless it is halted by some special effort such as a scheme to inject some over-spill population into the district and an invitation to industrialists to introduce light industry to the area.

In the section on infectious disease reference is made to the epidemic of Asian 'flu which affected Llanfyllin R.D. in September and October. Reference is also made to pneumonia and a comment upon the rather high rate for this disease must be made here. The fact that this notification rate was about two and a half times as large as that for England and Wales is capable of several explanations. About sixty per cent were over sixty years old but half of this percentage was in the age group 60-70 years. Apart from this and other reasons however, there is one factor, namely housing, which must play a part, perhaps a larger part than is generally realized, in the causation of infections of this type. The ill effects of bad housing are occasioned in ways as devious as they are inevitable. The occupants of such dwellings tend to fall to a lower plane of physical well-being and to harbour chronic infections which they themselves may be able to contain reasonably well but which, nevertheless, are ready to prey at any time upon the unwary citizen who is less used to them. Or again, such occupants may continue to suffer a subnormal state of health after being satisfactorily rehoused.

The section on sanitary conditions refers to Housing in the area, and from this it will be seen that very little building took place during the year; in fact only eleven private houses were built and twenty two improved. Credit restrictions were severe and this in itself was the chief reason for the cessation of building work. Unfortunately there is still much property in the district which is unfit for human habitation as judged by present day standards and as the Rural Housing Survey progresses, the extent of this problem becomes much clearer.

Measles occurred in epidemic form during the year and this report includes not only a description of it but also a review of this disease as it affected the Llanfyllin R.D. over the past twenty-five years. Various factors tend to counteract one another but on the whole it would appear that the population has improved its defences against the treacheries of an infection which is not always a simple childhood ailment.

The local health services provided under Part III of the National Health Service Act 1946 continued to operate satisfactorily during the year. An additional child health clinic was opened at Llanfair Caereinion and promised to meet a definite need in that locality.

The services of a full time health visitor are much appreciated. Miss Bryan who is based at Llanfyllin serves not only this borough but also a large part of Llanfyllin R.D. Her services cannot possibly be extended, except on occasion, to other areas and a need exists for at least one other health visitor in North Montgomeryshire.

The section of this report dealing with the sanitary circumstances of the area was prepared with customary care by the Chief Surveyor/Public Health Inspector and I must thank him for his valuable assistance in this as in other matters throughout the year. There was one change in staff caused by the resignation of Mr. E. G. Williams and the appointment of Mr. G. E. Woods.

Lastly I gladly acknowledge the friendly support and understanding which I invariably receive from you Mr. Chairman the other members of the Council, the Clerk and the staff.

I am,

Yours faithfully,

I. B. MILLAR.

Medical Officer of Health.

SECTION "A."

General Statistics of the Area.

Area of the District—163,477 Acres.

Registrar General's estimate of the mid 1957 resident Population
—9,790.

Number of Inhabited Houses according to Rate Books—3194

Rateable Value—£82,541

Sum represented by a Penny Rate—£332

Vital Statistics

POPULATION.

This continues to decline and the mid 1957 population of 9790 was calculated to be as much as 80 fewer than that for mid 1956

Live Births

	Male	Female	Total
Legitimate	63	67	130
Illegitimate	5	4	9
	—	—	—
Total	68	71	139
	—	—	—

Note :- 97 of these births (46 male, 51 female) took place outside the Llanfyllin R.D.

The 42 domiciliary births (22 male, 20 female) occurred in Registration Districts as follows :

	Male	Female	Total
Llanfair Caereinion	5	8	13
Llanrhaeadr	3	3	6
Llansantffraid	14	9	23
	—	—	—
Total	22	20	42
	—	—	—

Note:- None of these domiciliary births was recorded as illegitimate.

Crude Birth Rate : 14.2 per 1000 population.

Corrected Birth Rate (for age and sex) : 16.6 per 1000 population.

England and Wales Birth Rate 1957 : 16.1. (Provisional)

Montgomeryshire Birth Rate 1957 : 15.22.

Wales Birth Rate 1957 : 15.95.

Still Births

	Male	Female	Total
Legitimate	—	—	—
Illegitimate	—	4	4

Still Birth Rate : 27.97 per 1000 live and still births.

England and Wales Still Birth Rate 1957 : 22.5 (Provisional)

Montgomeryshire Still Birth Rate 1957 : 36.6

Wales Still Birth Rate 1957 : 25.9

Infant Mortality

(a) Neonatal Deaths : 1 (male, legitimate).

Neonatal Mortality : 7.2 per 1000 live births.

England and Wales Neonatal Mortality Rate 1957 : 16.5 (provisional).

(b) Postnatal Deaths : Nil.

(c) Total Infant Mortality : 7.2 per 1000 live births.

England and Wales Infant Mortality Rate 1957 : 23.1 (provisional)

Montgomeryshire Infant Mortality Rate 1957 : 22.0

Wales Infant Mortality Rate : 1957 : 28.38

(d) **Perinatal Mortality.** 34.96 per 1000 total births (exactly the same figure as last year).

England and Wales P.M.R. 1957 : 36.2 (provisional)

All the still births and infant deaths occurred within the perinatal period and their causes are as follows :-

	Male	Female	Cause
(a) Infant Deaths	1	—	Prematurity and Ante-partum haemorrhage (birth weight $2\frac{1}{2}$ lbs.)
(b) Still Births	—	4	(1) No cause found. (2) No apparent cause but the mother had suffered a fright about a week before the birth. (3) Congenital abnormality. (4) Congenital abnormality.

Deaths

	Male	Female	Total
All causes	70	56	126

Crude death rate: 12.87 deaths per 1000 population.

Corrected death rate (for age and sex): 12.45 per 1000 population.

England and Wales Death Rate 1957 : 11.5 (provisional)

Montgomeryshire Death Rate 1957 : 11.82

Wales Death Rate 1957 : 12.52

DEATHS BY AGE, CAUSE AND SEX

Cause	Sex	Age Groups										Total	
		under 1 year	1-10	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90+	M	F
Syphilitic disease	F								1				1
Malignant neoplasm stomach	M						1		1			2	
	F						1		1	1			3
Malignant neoplasm lung, bronchus	M						1					1	
	F							1					1
Malignant neoplasm breast	F					1		1					2
Malignant neoplasm oesophagus	M						1					1	
	F						1						1
Malignant neoplasm colon	M						2	1	2			5	
Malignant neoplasm rectum	M								1			1	
Malignant neoplasm ovary	F								1				1
Malignant neoplasm pancreas	M								1	1		2	
	F							1					1
Malignant neoplasm kidney	M							1				1	
Malignant neoplasm liver	F								1				1
Malignant neoplasm other types	M				1							1	2
Leukaemia						1						1	
Vascular lesions of nervous system	M						2	5	3	1		11	
	F					2	1	3	7	2			15
Coronary disease													
angina	M						3*		2	1		6	
	F							2	2	1			5
Hypertension with heart disease	M								1			1	
	F								1				1
Other heart disease	M							2	4*	2	2	10	
	F					1	1	1	3	3			8
Other circulatory disease	M							2*	1	3*		6	
Influenza	M							1*				1	
Pneumonia	M										1*	1	
	F									1			1
Bronchitis	M							2				2	
	F									1			1
Other diseases of respiratory system	F								1				1
Ulcer of stomach and duodenum	M								1*			1	
Gastritis, enteritis and diarrhoea	M							1				1	
Nephritis and nephrosis	M												
	F					1						1	
Hyperplasia of prostate	M							1					1
Other defined and ill-defined diseases	M	1							1			1	
	F									3		4	
Motor vehicle accidents									2	6*	2		10
	M		1	1		2						4	
	F							1					
All other accidents	M		1				1					2	1
	F												
Suicide	M						1	1		1			1
Totals	M	1	2	1	1	4	12	16	18	11	4	2	
	F					3	4	11	20	16	2	70	56
Grand Totals		<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>7</u>	<u>16</u>	<u>27</u>	<u>38</u>	<u>27</u>	<u>6</u>	<u>126</u>	

*denotes multiple causes as follows :

Coronary heart disease—one of these deaths was also associated with influenza.

Other heart disease—one of these deaths was also associated with chronic bronchitis.

Other circulatory disease—in the 60-70 age group one of these deaths also was associated with a ruptured abdominal aneurysm and coronary atheroma, while another was associated with aortic stenosis and chronic nephritis. In the 80-90 age group one of these deaths was also associated with chronic nephritis, while another was associated with pneumonia and gangrene.

Influenza—this death was complicated by pneumonia and myocarditis.

Pneumonia—this death was also associated with cerebral vascular disease.

Ulcer of duodenum—this death was also associated with stricture of oesophagus and emphysema.

Ill-defined disease—one of these deaths was also associated with pernicious anaemia and another was associated with fracture of the thigh and cardiac failure.

Accidents—further analysis :

Month of accident	Sex and Age		Cause of accident
	Male	Female	
January	44		Motor collision
	45		Thrown from Tractor
March		88*	Asphyxia due to a fire
May	53*		Tractor overturning
		63	Crossing road behind bus
September	25		Motor cyclist in collision
October	7		Struck by motor
November	2*		Drowning

*Non-highway accidents

		M	F
Average age at death (excluding juvenile deaths)	70	68	72.5
Average age at death due to Cancer	64.5	64.3	64.7
Average age at death due to Coronary disease	67.55	65.3	70
Average age at death due to accidents, suicide, etc.	44.1	36.25	75.5
Average age at death (excluding cancer, coronary disease and accidents)	73.8	73	74.6

COMPARATIVE STATISTICS

Year	Population (Mid-year Estimate)	Birth Rate (Crude)		Death Rate (Crude)		Stillbirth Rate		Perinatal Mortality Rate		Infant Mortality Rate	
1926-30										58.2	67.9
1931-35	11726	16.8	15.0	13.86	12.0	54.24	40.96			66.2	61.9
(Average)	(1931 Census)										
1936	11130	14.1	14.8	13.1	12.1	45.7	39.7	80.0	60.8	53.8	58.7
1937	10990	13.7	14.9	14.6	12.4	74.1	39.0	98.8	60.2	46.6	57.7
1938	10830	15.1	15.1	12.7	11.6	29.7	38.3	59.5	58.6	49.1	52.8
1939	10790	16.4	15.0	14.7	12.1	53.2	38.1	64.8	58.5	89.4	50.6
1940	10930	11.8	14.6	16.7	14.3	85.1	37.2	113.4	57.7	54.3	56.8
1941	11460	14.3	14.2	15.1	12.9	52.3	34.8	92.5	54.7	61.9	60.0
1942		15.3	15.8	15.1	11.6	39.0	33.2	50.0	52.1	46.2	50.6
1943		17.1	16.5	11.9	12.1	31.6	30.1	47.4	47.9	32.6	49.1
1944	10470	17.3	17.6	14.1	11.6	37.4	27.6	63.8	44.5	44.2	45.4
1945	10420	18.52	16.1	13.5	11.4	35.0	27.6	60.0	45.2	41.5	46.0
1936-45	10877	15.4	15.5	14.1	12.2	48.3	34.6	73.0	54.0	51.9	52.8
(Average)											
1946	10490	15.3	19.1	13.1	11.5	24.4	27.2	36.6	44.3	37.5	42.9
1947	10360	17.7	20.5	13.6	12.0	31.6	24.1	47.4	40.2	32.6	41.4
1948	10344	18.0	17.9	13.8	10.8	5.3	23.2	37.4	38.5	37.6	33.9
1949	10380	17.6	16.7	13.0	11.7	5.4	22.7	43.4	38.0	54.6	32.4
1950	10350	15.2	15.8	12.7	11.6	48.5	22.6	66.6	37.7	44.6	29.6
1951	10150	15.5	15.5	14.1	12.5	—	23.0	25.5	38.1	38.2	29.7
	10307										
	(1951 Census)										
1952	9987	16.0	15.3	13.2	11.3	18.4	22.7	43.0	37.5	43.8	27.6
1953	9923	17.0	15.5	11.8	11.4	5.9	22.4	29.4	37.0	29.6	26.8
1954	9940	17.5	15.2	10.4	11.3	5.7	23.5	34.3	38.1	40.2	25.4
1955	9910	15.4	15.0	11.4	11.7	19.2	23.2	38.5	37.6	26.1	24.9
1946-55	10183	16.5	16.6	12.7	11.6	16.4	23.5	40.9	38.6	38.5	31.5
(Average)											
1956	9870	14.2	15.6	11.5	11.7	20.1	23.0	35.0	36.8	28.6	23.8
1957	9790	14.2	16.1	12.9	11.5	28.0	22.5	35.0	36.2	7.2	23.1

Note : The Perinatal Mortality Rates prior to 1946 are approximate and are probably minimal

The second set of figures refers to England and Wales.

SECTION "C."

Sanitary Circumstances of the Area.

Water Supplies.

(i) Quality.

To report upon the quality of the water supplies in this district it is necessary to distinguish between public supplies and supplies drawn from privately owned sources.

(a) Public supplies operated by the Council.

The results of samples of water taken from the various public supplies and examined bacteriologically during 1955, 1956 and 1957 are given below. On the whole, the quality of the various piped supplies operated by the Council is good and in considering the following table it should be borne in mind that more attention is given to those supplies which occasionally give unsatisfactory results than to those which consistently give good results.

Results of Bacteriological Examination of Water Samples from Works Operated by the Council.

Untreated Supplies.					
	Highly Satis.	Satisfactory	Suspicious	Unsatis.	Total
1955	62	10	1	14	87
1956	98	4	8	12	122
1957	65	20	7	17	109
	225	34	16	43	318

Treated Supplies.					
	Highly Satis.	Satisfactory	Suspicious	Unsatis.	Total
1955	68	1	0	5	74
1956	61	1	1	2	65
1957	63	1	0	2	66
	192	3	1	9	205

In addition to the 175 samples examined bacteriologically during the year, 19 samples were submitted to the Public Analyst for chemical analysis, all of which were found satisfactory.

(b) **Private Supplies.**

Requests are frequently received for samples of privately owned supplies (mostly shallow wells) to be examined. It has not always been possible to comply with the requests received but nevertheless, in response to such requests, and in other cases where the Public Health Inspectors considered it advisable to do so, a total of 29 samples of private water were bacteriologically examined during the year and gave the following results.

Number of samples found highly satisfactory—6.

„	„	satisfactory—3.
„	„	suspicious—5.
„	„	unsatisfactory—15.

—
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These results are the best indication available of the quality of the private supplies in the district but they may tend to indicate better conditions than actually prevail. Many of the samples have been taken after protective works had been carried out at the various sources, in preparation for a grant-aided farm water scheme or the erection of a new house.

(ii) **Quantity.**

The adequacy of the supplies varies considerably between one parish and another, and in no parish is a piped supply of water available to every house. Indeed, the distribution of the houses and, in some cases, their elevation makes it unlikely that they can be supplied from public mains in the foreseeable future. I give below a brief description of the circumstances in various localities at the end of 1956.

(a) **Parish of Llanfair Caereinion.**

This Parish has the highest population of any in the rural district and contains more houses supplied by water, from the public mains than any other parish. Nevertheless, less than half of the houses in the parish are within reach of watermains. Since 1954, water has been extracted from the River Banwy and an ample supply of wholesome water is assured. The problem which remains, however, is one of distribution.

(b) Parish of Llanfechain.

A new scheme of supply for the village of Llanfechain came into operation during 1953. The source is a well in valley gravel from which, after chlorination, water is pumped to a service reservoir. There is no doubt that the works have greatly improved living conditions in the village and have made possible the erection of a fair sized housing estate and school. A number of agricultural properties are supplied and while the amount of water available is comparatively small, it is unlikely that there will be any shortage of supplies for many years within the area of the distribution system.

(c) Parishes of Llandrinio, Llandysilio, Llansantffraid Deytheur and Llansantffraid Pool.

These parishes are supplied from a spring at Winllan, Llansantffraid, augmented by pumping water from a well at Parson's Bridge in the Parish of Llandysilio. This source is referred to in my predecessor's report for the year 1954 which expresses the belief that the yield of the Parson's Bridge well will be sufficient to meet the demands of the area for many years. Unfortunately, later experience has shown that the well cannot be relied upon during periods of drought and, while no rationing of the supply has been necessary up to date, it is now evident that a new source is necessary to meet the requirements of these parishes in the immediate future. I am glad to know that arrangements are being made to acquire an additional source.

(d) Parish of Carreghofa.

Part of this Parish is supplied with water by Oswestry R.D.C. but the distribution system is inadequate and new works of water supply are urgently needed to meet the needs of the parish as a whole, including two housing estates owned by the Council. The additional source referred to at (c) above will meet the demands of this parish.

(e) Parishes of Garthbeibio and Llangadfan.

These parishes contain the villages of Foel and Llangadfan, both of which are supplied from a source at the Foel. Further development of these villages cannot take place without endangering the adequacy of the supply.

(f) Parish of Llanfihangel.

The hamlet of Llanfihangel is a comparatively small one of less than a dozen houses. It has no public piped supply and most of the houses are dependent upon a privately owned supply which is inadequate for the needs of the hamlet. Better provision for the hamlet is needed, but owing to the elevation of the locality, I understand that it is difficult to provide it with a supply of water at reasonable expense, but I am glad to know that the Council are still considering a pumping scheme for the area.

(g) Parish of Meifod.

The village of Meifod is adequately supplied and the distribution system was extended in 1954.

The village of Pontrobert has for many years been in need of a public piped supply to replace the public and private shallow wells upon which the village has had to depend. During the year under review an extension of the Llanfair distribution system has been carried out which fully meets the requirements of the village and the many properties within reach of the main from Llanfair to Pontrobert.

A satisfactory supply has been provided during the year under review to the village of Bwlchycibau, by purchasing a bulk supply from the Borough of Llanfyllin and providing the necessary distribution system.

(h) Parish of Pennant.

In my report for 1956 I referred to the possibility of augmenting the supply to the village of Penybontfawr by drawing on the Liverpool Corporation aqueduct which passes close to the village. I now understand that agreement has been reached by all interested parties and that a connection to the aqueduct will be made during 1958.

(i) Generally.

Much of the district remains without a public piped supply of water and because of the sparsely populated nature of the area it will no doubt require very considerable expenditure to provide a comprehensive distribution system throughout the district.

Nevertheless, steady progress is being made towards this goal and when the works in progress, and others now in an advanced stage of planning, are in operation the district will have made substantial progress towards a comprehensive piped supply.

(iii) Plumbo-Solvent Action.

I would not expect any of the piped supplies controlled by the Council to have a marked aggressive action on metals. In two cases, the water is passed through a contact chamber of limestone chippings to counteract any acidity in the water, and the pH value of the water extracted from the River Banwy at Llanfair is also adjusted.

(iv) Action in respect of Contamination.

No specific action was taken in respect of any form of contamination other than proper supervision of the various sources and the routine chlorination of supplies where necessary.

(v) Dwelling Houses supplied from Public Mains.

The following table gives the number of dwelling houses and the estimated population supplied from public water mains directly into the houses or by means of standpipes.

Parish.	Supply laid on to dwellings or curtilage.		Supply by Standpipe.	
	Number of Dwellings	Approx. Population	Number of Dwellings	Approx. Population
Works controlled by Council.				
Meifod ...	79	237	30	90
Llanerfyl ...	26	78	15	45
Llansantffraid Pool	135	422	17	53
Pennant ...	35	105	20	60
Llangynog ...	35	105	50	150
Llangadfan ...	27	66	15	36
Llanfair Caereinion ...	202	606	34	102
Llanfihangel including Dolanog Village }	16	48	—	—
Garthbeibio ...	2	6	1	3
Llangyniew ...	2	6	—	—
Hirnant ...	—	—	—	—
Llandysilio ...	68	233	—	—
Llandrinio ...	69	240	—	—
Llanfechain ...	73	238	—	—
Llansantffraid Deytheur	30	99	—	—
Guilsfield (Without) ...	18	54	—	—
Llanrhaeadr ...	68	204	4	12
	—	—	—	—
Total	885	2747	186	551
	—	—	—	—
Works not controlled by Council.				
Llanfihangel ...	3	9	—	—
Llanwddyn ...	102	306	—	—
Carreghofa ...	47	141	2	7
Hirnant ..	2	8	—	—
Llangynog ...	4	12	—	—
Llanrhaeadr ...	2	9	—	—
	—	—	—	—
Total	160	485	2	7
	—	—	—	—
Grand Total	1045	3232	188	558
	—	—	—	—

Note: The percentage of the population served by public mains in 1957 was 1.6% greater than in 1956, nevertheless it is still only 38.7%.

Drainage and Sewerage.

The need for sewerage the various villages in the District has been pointed out in previous Annual Reports of the Council's Medical Officer. It is pleasing to be able to report some progress.

Three villages have been sewerage during the past few years.

The first was Llanrhaeadr (completed in 1954), the second was Llansantffraid (completed in 1955) and the third was Llanfair Caereinion (completed in 1956). These works have greatly improved the sanitary condition of the villages and have made possible improvements to many houses in the villages, which had previously been without bathrooms and drainage systems.

Sewerage schemes are urgently required in several other villages, and I am glad to know that the Council are endeavouring to meet the need and that other villages are likely to be dealt with in the near future.

Closest Accommodation.

In this District closet accommodation does not vary substantially from one year to another, except when new village sewerage schemes are brought into operation. Conversions from pail closets and privies to water closets also take place when houses are improved by means of grant-aided work under the Housing Acts and the Hill Farming and Livestock Rearing Acts and a small number of premises are improved without the aid of grant.

During the past few years, the number of pail closets and privies converted into water closets under the above schemes is as follows :

Year	Village Sewerage Schemes	Housing Act Improvement Grants	A.E.C. Grants and others	Total per year
1954	31	5	7	43
1955	73	5	12	90
1956	97	22	17	136
1957	—	22	16	38
	201	54	52	307

On the basis of a survey carried out in 6 parishes, I estimate the number of pail closets and privies in the district to be 2386.

Public Cleansing.

There has been little change in arrangements for house refuse collection during the year. Most of the villages and hamlets in the District are now scavenged by the Council either through their own contractors or by arrangements with an adjoining Authority.

Although the present arrangements are fairly comprehensive in that they cater for most groups of houses, there still remains a comparatively large number of houses so situated that it is almost impossible to extend the service to them. The cost of scavenging during the financial year ended March 1957 was £2,395. It remains a matter for the Council to consider whether or not an increase in expenditure can be justified so as to include the more remotely situated houses.

During the year under review the tipping space at the Llanfair Caereinion tip became filled and it was necessary to extend the tip. A further 912 sq. yds. of field was taken over for tipping and to compensate the farmer, 1023 sq. yds. of the old tip was handed back to him.

In December, an outbreak of fowl typhoid broke out at a farm abutting the Council's refuse tip at Carreghofa. The farmer concerned complained that, as this disease is spread by rats, he thought rats from Council's Tip were to blame. On inspection, the refuse tip was found to be completely free from rats.

Rodent Control

The following is a summary of rodent control work during the year :

Type of Premises	No. of Inspections	No. of Treatments
Dwelling Houses	286	86
Business Premises	113	13
Agricultural Premises	573	22
Refuse Tips	21	3
Sewers	4	4

Public Health Inspections.

During the year the Public Health Inspectors carried out the following inspections :—

Public Health	54
Water Supplies	135
Drainage	289
Complaints	18
Factories	17
Infectious Disease	24
Housing Inspections	112
Rural Housing Survey	41
Refuse Collections and Disposal	67

As a result of the above inspections the following notices were served, with the result indicated.

	Informal	Statutory	Complied with
Public Health Act 1936	18	—	16
Housing Act 1957	1	—	1
Factories Act 1937	2	—	2
Food and Drugs Act 1955	1	—	1
Water Act 1945	—	2	1
Prevention of Damage by Pests Act 1949	1	—	1

Shops and Offices.

It was not necessary to take any action during the year.

Camping Sites.

There are no licensed camping sites in the District.

Towards the end of the year it was decided that the camping site at Neuadd Bridge Farm, Llanfair Caereinion should be inspected with a view to its being licensed. On inspection it was found that the site was unsatisfactory from the point of view of water supply, drainage and disposal of waste water, cleanliness of the site and fire precautions.

The occupier's attention was drawn to the necessity of obtaining a licence and to the matters requiring attention. At the end of the year negotiations with the owner were proceeding.

Smoke Abatement.

Atmospheric pollution occurs from time to time when the wind direction is from the large industrial areas to the North-east and East of this district. The wind direction at Llanwddyn was between North and East on 80 days at an average strength of 3.25. The average wind strength for the rest of the year was 2.5.

Swimming Baths and Pools.

There are no swimming baths or pools in the District.

Eradication of Bed Bugs.

No action was necessary during the year.

Housing

No. of Official Representations made to the Council	12
No. of Undertakings received from owners not to use the premises for human habitation	8
No. of premises actually closed	3
No. of houses constructed in the area	
(a) Council Houses	—
(b) Private Houses	11
No. of Houses improved by means of Improvement Grants under the Housing Acts	22
Total Amount of money paid in respect of the above improvement grants	£7294

Section "D"

Factories Acts 1937 and 1948.

PART I OF THE ACT

1.—**Inspections** for purposes of provisions as to health (including inspections made by Public Health Inspectors)

Premises (1)	Number on Register (2)	Number of		
		Inspections (3)	Written notices (4)	Occupier prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	7	1		
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	35	16	1	
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers premises) ...				
TOTAL	42	17	1	

2.—**Cases in which Defects were found.**

Particulars	No. of cases in which defects were found				No. of cases in which prosecutions were instituted
	Found	Remedied	Referred		
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness	—	—	—	—	—
Overcrowding	—	—	—	—	—
Unreasonable temperature	—	—	—	—	—
Inadequate ventilation	1	1	—	—	—
Ineffective drainage of floors	—	—	—	—	—
Sanitary conveniences					
(a) Insufficient	2	2	—	—	—
(b) Unsuitable or defective	—	—	—	—	—
(c) Not separate for sexes	1	1	—	—	—
Other offences against the Act (not including offences relating to Outwork)	—	—	—	—	—
	4	4	—	—	—

Outworkers

There are no outworkers in the District and therefore no statistics relating to Part VIII of the Act are included in this report.

Section "E"

Food

(1) There are in the District the following numbers of premises where food is prepared, sold or stored :—

Bakehouses	-	7
Butcher's Shops	-	9
Fried Fish and Chip Shops		2
General Provision Stores		52
Greengrocer's Shops		1
Cafes	-	5
Licensed Premises	-	29
Ice Cream manufactory		1
Cheese manufactory	-	1
Confectioner's Shop	-	3

(2) Section 16 of the Food and Drugs Act 1955 requires the registration of all premises used for the manufacture or sale of ice cream or the preparation or manufacture of sausages or potted, pressed, pickled or preserved food intended for sale. The following numbers of premises are so registered :—

For the manufacture of ice cream—	1
For the sale of ice cream—	32
For the manufacture of sausages—	3

(3) Milk Sampling. Six samples of milk from four dairies serving the district were submitted to the Public Health Laboratory for routine tests. All were satisfactory except one which was taken on a particularly hot day in June.

(4) There are no dairies registered by this Council under the Milk and Dairies Regulations 1949. One producer of T.T. milk within the district holds a Dealers Licence and four dealers with premises outside the District hold supplementary licences from the Council authorising them to sell T.T. and Pasteurised Milk within the district.

(5) The number of inspections of registered food premises during the year was 12 and in addition 18 inspections were made of non-registered premises. In general the inspections disclosed satisfactory conditions.

(6) Educational activity in relation to food hygiene was confined to advice and discussion during routine inspection of food premises.

(7) Two slaughterhouses are licensed and meat inspection was carried out at these premises during the year.

(8) All meat found to be unfit for human consumption is dyed green. It remains in the possession of the owner and after boiling, is used for animal feeding.

(9) 15 lbs. of tinned peaches and 6 lbs. of bacon were found to be unfit for human consumption. These were disposed of on the Councils refuse tip.

(8) Ice Cream is manufactured at one factory only and, having regard to the Ice Cream (Heat Treatment etc.) Regulations 1947-52 I consider that the processes are carried out satisfactorily.

(9) Structural alterations were carried out at 7 premises in order to comply with the Food Hygiene Regulations 1955-56 and methods of food handling were improved in several premises as a result of informal action.

The table below gives details of carcasses inspected and condemned in whole or in part, during the year.

Carcasses Inspected and Condemned

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	413	2	3	1702	370	—
Number inspected	413	2	3	1702	370	—
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCI						
Whole carcasses condemned	—	—	—	3	—	—
Carcasses of which some part or organ was condemned	97	1	—	8	9	—
% of the number inspected affected with disease other than tuberculosis and cysticerci	23.48%	50.0%		0.65%	2.4%	—
TUBERCULOSIS ONLY						
Whole carcasses condemned	—	—	—	—	—	—
Carcasses of which some part or organ was condemned	4	—	—	—	21	—
% of the number inspected affected with tuberculosis	.97%	—	—	—	5.7%	—
CYSTICERCOSIS ONLY						
Carcasses condemned either in whole or part	—	—	—	—	—	—
Carcasses submitted to treatment by refrigeration	—	—	—	—	—	—

CONDEMNATIONS

1 part forequarter Beef	14 pig heads
3 bovine heads	1 pig liver
9 bovine lungs	3 pigs lungs
32 bovine livers	3 pig heart
58 part bovine livers	4 pig pluck
1 bovine heart	1 pig stomach and intestines
4 bovine thin skirts	9 sow heads
3 sheep carcasses	1 part hindquarter sow
3 parts forequarter sheep	1 sow lung
3 parts hindquarter sheep	1 sow heart
1 sheep head	1 sow udder
4 sheep livers	

Total weight of meat condemned: 15 cwt. 36 lbs.

Cysticercus Bovis

No evidence of *Cysticercus Bovis* was found during the year. One case was notified from a slaughterhouse outside the area. An investigation was carried out at the farm from which the animal was sold, but it was impossible to trace the source of infection.

SECTION "F."

Infectious Disease Control

The total number of notifications was 272. Measles occurred as an epidemic and accounted for 224 of the total, thus leaving 48 for other diseases, in fact, exactly the same as last year's total for diseases other than measles.

The following table gives a summary of the cases:—

	Male	Female	Total
Whooping Cough	10	10	20
Measles	105	119	224
Pneumonia	13	5	18
Erysipelas	1	2	3
Paratyphoid Fever	1		1
Tuberculosis			
(a) Pulmonary	2	1	3
(b) Non-pulmonary	1	2	3
Totals	<hr/> 133 <hr/>	<hr/> 139 <hr/>	<hr/> 272 <hr/>

Whooping Cough. Most of the cases occurred in the first and last quarters of the year. The eleven cases in the first quarter occurred in five families, four of which were resident in Pentrebeirdd and one in Meifod. The second quarter case was in Meifod. The third quarter cases were in Llanwddyn and Llanerfyl, while the six cases in the last quarter occurred in five families, four of which were resident in Llansantffraid and one in Llanfechain.

Four of these cases were known to have been immunized against this disease. The girl in the 2-3 age group had been done a year before, one of the girls in the 3-4 age group had been done only four months before, and the other girl two years before (but immunization in this case was incomplete). and the nine-year-old boy had been done in January, 1949. Of the other sixteen cases, eleven had no immunization record and four could not be ascertained.

The analysis of the whooping cough cases is as follows:—

	Males					Females					Totals.				
	Quarters				Year	Quarters				Year	Quarters				Year
	I	II	III	IV		I	II	III	IV		I	II	III	IV	
Under 1 year	2	1	1		4						2	1	1		4
1—2 years				1	1			1		1			1	1	2
2—3 „								1*		1				1	1
3—4 „						2*				2	2				2
4—5 „									1	1				1	1
Total under 5	2	1	1	1	5	2		1	2	5	4	1	2	3	10
5—6 years						1				1	1				1
6—7 „						1				1	1				1
7—8 „	1			1	2						1			1	2
8—9 „	1				1				1	1	1			1	2
9—10 „				1*	1	1				1	1			1	2
Total 5—10	2			2	4	3			1	4	5			3	8
10—11 years	1				1						1				1
13—14 „						1				1	1				1
Totals	5	1	1	3	10	6		1	3	10	11	1	2	6	20

*Children previously immunized against whooping cough.

Measles. It was a year of heavy notification, especially in the second quarter, and it is gratifying to report that no deaths occurred as a result of the epidemic and that, as far as could be ascertained by indirect means, there were no major ill-effects.

As might be expected in a rural community, the proportion of the older age groups affected by measles was high due to the effect of isolation. In 1957 the proportions in the age groups 0—5 years, 5—10 years, and over 10 years, given as percentages of the total cases, were 32, 49·7 and 18·3. In Welshpool these proportions were 38, 59·3 and 2·7, and in Llanfyllin M.B. they were 30, 61·4 and 8·6. Taking the last three years together, the following table gives comparisons for the three most populous North Montgomeryshire Districts, from which it will be seen that Forden R.D. occupies an intermediate position, while Llanfyllin R.D. shows more than four times as many cases over ten years of age as Welshpool.

Percentage Notifications in the period 1955-57.

Age Group.	Llanfyllin R.D.	Forden R.D.	Welshpool M.B.
Under 5 years	30·3	40·3	38
5—10 years	52·3	50·3	58
Over 10 years	17·4	9·4	4

The analysis of the measles cases in 1957 is as follows:—

	Males				Females				Totals			
	Quarters			Year	Quarters			Year	Quarters			Year
	I	II	III		I	II	III		I	II	III	
Under 1 yr.	1	1		2		1		1	1	2		3
1—2 yrs.		3	2	5	1	3		4	1	6	2	9
2—3 „	2	3	4	9	1	6	2	9	3	9	6	18
3—4 „	1	2	6	9	4	6	4	14	5	8	10	23
4—5 „	4	3	5	12	1	2	2	5	5	5	7	17
Totals	—	—	—	—	—	—	—	—	—	—	—	—
under 5	8	12	17	37	7	18	8	33	15	30	25	70
	—	—	—	—	—	—	—	—	—	—	—	—
5—6 yrs.	2	3	4	9	1	3	4	8	3	6	8	17
6—7 ..	4	8	5	17		8	6	14	4	16	11	31
7—8 „		6	3	9	1	4	3	8	1	10	6	17
8—9 „	3	6	3	12	1	6	2	9	4	12	5	21
9—10 „	2	5	3	10	2	10	1	13	4	15	4	23
	—	—	—	—	—	—	—	—	—	—	—	—
Totals 5-10	11	28	18	57	5	31	16	52	16	59	34	109
	—	—	—	—	—	—	—	—	—	—	—	—
10—11 yrs.	1	2	1	4		6	2	8	1	8	3	12
11—12 „	1			1	1	3	1	5	2	3	1	6
12—13 „		2	1	3		3		3		5	1	6
13—14 „		1		1		5		5		6		6
14—15 „					3	1	1	5	3	1	1	5
16—17 „							1	1			1	1
Over 25 yrs.		1		1	1	2		3	1	3		4
Age unknown		1		1		3	1	4		4	1	5
	—	—	—	—	—	—	—	—	—	—	—	—
Totals	21	47	37	105	17	72	30	119	38	119	67	224

Epidemics of measles are known to occur in this country at regular intervals and at much less frequent intervals in isolated communities such as certain of the Yorkshire dales. A study of this disease over the past $3\frac{1}{2}$ years in the Llanfyllin District is therefore of interest, because it would appear to indicate that Llanfyllin R.D. occupies an intermediate position. The following analysis of cases in relation to place of residence shows that in the first half of 1955 Guilsfield and Llanfair Caereinion were the main centres of the infection probably in conjunction with the widespread epidemic in Welshpool at that time. In the second half of 1955 Llantihangel, Llwydiarth and Dolanog became the main centres. The following year was one of immunity. In 1957 an epidemic gathered momentum in the first quarter in places like Meifod, Llansantffraid, Llanrhaiadr and Penybontfawr, and reached its zenith in the second and third quarters in places as widespread as Llanerfyl and Llansantffraid, Llanfair Caereinion and Llanymynech, Meifod and Llanfechain, Llangyniew and Llandrinio, which together accounted for nearly three-quarters of the cases occurring in this period. Once again the isolated nature of the community explains the prolonged nature of the epidemic, which could have spent itself in three or four months in towns like Welshpool and Oswestry. Taking the aggregate of the figures in the following analysis it can be shown that 100 families would have had 146 cases, of whom 43 would have been under five years of age and 16 aged five years. This is very similar to the figures for Forden R.D. over the same period, where 100 families would have had 154 cases, 48 of them under five years and 25 aged five years. In Welshpool, however, in the year 1957 100 families would have produced only 132 cases, 50 of them under five years and 36 aged five years. In Llanfyllin M.B. 100 families would have produced 134 cases, 40 of them under five and 14 aged five years. While the reasons for this difference are complex, two of them are size of family and the number of susceptibles. The average size of family is probably smaller in Welshpool than in the Llanfyllin Rural District, but it is likely to be as true to say that the number of susceptibles per family is greater in Llanfyllin due to the greater isolation.

Year and Quarter		District	Age under 5 years	Age 5 years	Total cases	Number of families affected.
1955	I	Guilsfield	1	2	5	1
		Pool Quay		1	1	1
		Llanfair	1		1	1
		Foel	1		1	1
		Unascertained	1		1	1
			—	—	—	—
		Total	4	3	9	5
			—	—	—	—
	II	Guilsfield	1		1	1
		Meifod	1		3	2
		Llwydiarth			1	1
		Llanfair	2	4	14	13
		Bwlchycibau	1		1	1
		Llanwddyn	1		2	2
		Llanymynech	4		6	2
			—	—	—	—
		Total	10	4	28	22
			—	—	—	—
	III	Dolanog	3	3	14	8
		Llanfair	4	4	18	13
		Llangyniew		1	1	1
		Cefn Coch (Llanfair)			1	1
		Pontrobert		1	1	1
		Penybont			1	1
		Llwydiarth	2	1	5	3
		Llanfihangel	3		13	10
		Llandrinio	1		2	2
		Penybontfawr		1	2	2
		Bwlchycibau			1	1
		Tybrith			1	1
		Llanwddyn	1	1	2	1
		Four Crosses			2	1
		Carreghofa	1		1	1
		Unascertained			2	2
			—	—	—	—
			Total	15	12	67
			—	—	—	—

Year and Quarter	District	Age under 5 years	Age 5 years	Total cases	Number of families affected.
1956	IV				
	Penybont	1		1	1
	Pontrobert			2	2
	Dolanog			1	1
	Llanfihangel		1	5	3
	Llanfair	1		1	1
		—	—	—	—
	Total	2	1	10	8
		—	—	—	—
	Yearly Total	31	20	114	84
1956	III				
	Bwlchycibau			1	1
	IV				
	Llanerfyl			1	1
1957		—	—	—	—
	Yearly Total			2	2
		—	—	—	—
	I				
	Meifod	5		8	4
	Llanerfyl	1	1	2	1
	Llansantffraidd	5	1	8	6
	Llanfihangel	1		3	3
	Llanfechain	1	1	3	2
	Penygarnedd			6	4
	Llanrhaiadr			3	2
	Llwydiarth	1		2	2
	Four Crosses	1		1	1
	Llanwddyn			1	1
	Unascertained			1	1
		—	—	—	—
	Total	15	3	38	27
		—	—	—	—
1957	II				
	Arddleen	1		3	2
	Pontrobert			1	1
	Llanfihangel	2		2	1
	Llandrinio	3	1	8	7
	Guilsfield			2	2
	Carreghofa	3		9	8
	Llangynog	1		2	1
	Penybont			1	1
	Dolanog	1		2	1
	Meifod	3		10	6
	Llangyniew	4	1	15	7
	Sarnau	2		5	3
	Llanfair	2	1	22	15

Year and Quarter	District	Age under 5 years	Age 5 years	Total cases	Number of families affected
	Criggion		1	2	1
	Llansantffraid			1	1
	Llanwddyn	2		3	3
	Pentrebeirdd			3	1
	Penygarnedd			2	2
	Bwlchycibau			1	1
	Llanerfyl	4	2	16	14
	Four Crosses			3	3
	Nantymeichiaid	2		4	1
	Unascertained			2	2
	Total	30	6	119	84
III	Llanerfyl	2		3	2
	Penybontfawr	1		5	2
	Llanymynech	5	2	15	10
	Four Crosses	1		1	1
	Nantymeichiaid		1	5	
	Llansantffraid	8	1	19	11
	Llanfair	1		1	1
	Meifod	1		1	1
	Llanfechain	5	5	15	7
	Bwlchycibau			1	1
	Unascertained			1	1
1958	Total	24	9	67	37
	Yearly total	69	18	224	148
	I				
	Llanfyllin			1	1
	Llandrinio	2		2	2
	Guilsfield	1		2	1
	Llangyniew	1		1	1
	Total	4		6	5
	II				
	NIL				
	III				
	NIL				

The last two epidemics of measles in England and Wales occurred in the second quarters of 1955 and 1957. The 1955 epidemic first appeared in Manchester and the surrounding towns towards the end of 1954, spreading by the end of February to most of the North and Midlands, including Welshpool, and in the second quarter to Wales and South-West and South-East England. In Llanfyllin R.D. the two main avenues of approach for an epidemic are through Welshpool and Oswestry, but in view of the fact that Welshpool's annual notification rates do not generally coincide with those of the Llanfyllin area, it is reasonable to assume that Oswestry is the main point of entry. The 1955 epidemic was probably an off-shoot of the major one in Welshpool in that year, just as the 1957 epidemic in Welshpool was probably an off-shoot of the major one in the Llanfyllin District.

The annual numbers of notifications since 1940 can be displayed semi-diagrammatically as follows:—

1940	10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10.
*1941	10, 10, 10, 10, 10, 1.
1942	8.
*1943	10, 10, 10, 9.
1944	10, 10, 10.
*1945	10, 9.
1946	10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 10, 4.
*1947	10, 10, 10, 5.
1948	10, 10.
*1949	4
1950	7.
*1951	10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 9.
1952	10, 1.
*1953	10, 10, 10, 10, 10, 10, 10, 10, 3
1954	2.
*1955	10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 4.
1956	2.
*1957	10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10. 10, 10, 4.

* National epidemic years.

Before 1940, when it became notifiable, epidemics of measles were described by my predecessor. In the winter of 1931-32 an extensive epidemic swept the district, causing three deaths and the closure of schools at Llanfair Caereinion, Llangyniew, and Dolanog. In 1933-34 another epidemic caused one death and the closure of schools at Carreghofa, Llandrinio, Llansantffraid, Llanfechain and Llanfair. Generally speaking, these epidemics coincided with the national upsurge of cases and when evacuation upset the national rhythm in 1940 this district followed suit by having an epidemic one year later than usual, i.e., 1940-41. Thereafter national and local epidemics were related, especially during the past eight years. In 1944 and 1946, however, an apparent divergence occurred, but when this is analysed on a quarterly basis it can be shown that the high numbers only missed being in the expected year by two or three months. In other words, in these years the local epidemic was part of the early growth of the national epidemic which was to reach its peak in the early months of the following year. In his annual report for 1946, the Medical Officer of Health stated that in his opinion future epidemics would be more widespread due to the increasing practice of transporting children from outlying schools to larger central schools. Experience has shown this to be true and the following table displays the increased incidence of measles among the younger age groups since 1950.

Percentage Notifications in Age Groups

Age Groups	Pre-1950	Post-1950
0—5 years	24·3	30·2
5—10 „	35·2	49·3
10—15 „	23·5	14·9
Over 15 „	17·0	5·6

Fortunately the potential ill-effects due to this tendency have been counteracted by better methods of treatment of the disease.

The absolute numbers for the post-1950 period are also greater, but more complete notification might have accounted for this. It is a fact, however, that this area has picked up each of the last four national epidemics, the last one to the extent of an attack rate of about 10% of those under 15 years of age, in contrast to the national attack rate which has never exceeded 7% at peak. The average annual attack rate for the period 1940-57 was 2·2% of those under 15 years and about 3·8% for England and Wáles. For the past seven years, however, this rate has been about 4% in this district and about 4·5% nationally.

When an epidemic hits this district it is likely, therefore, that the attack rate will be high and that fluctuations of the annual infection rates will be high. In the country generally the number of susceptibles probably varies by about 13% of those under 15 years, probably between 43% and 57%, but in this district both the variation and percentage of susceptibles are greater. Nevertheless, the attack rate cannot be expected to reach the intensity of a country town such as Welshpool. The comparisons in the following table are based on the number of births in each age group less deaths.

Attack Rates (percentages of those in the specific age groups).

Age Group	Llanfyllin. R.D.		Welshpool M.B.	
	1955	1957	1955	1957
0—5 years	4	9.1	17.7	2.9
5—10 „	7.5	13.1	31.6	4.1
5—6 „		16	38.6	
10—15 „	2.2	4.1	1.5	0.2

Thus the general tide of infection rises and falls with varying effects upon this district. Sometimes it almost fails to penetrate, sometimes it reaches pockets of susceptibility and occasionally the distribution is fairly general. The peak of infection may be early as in 1944 and 1946, or late as in 1957 but the outset of the epidemic is usually early in conjunction with national trends in the North-West and North regions of the country. One thing is certain, however, and that is the national decline in the fatality ratio for measles which has favoured all age groups although it still leaves a disparity between the youngest and oldest age groups of the order of 20 : 1 against the youngest groups. Llanfyllin R.D. has shared fully in this decline. in fact, there were no deaths cause by all these cases in 1957 (fatality ratio: NIL). Nevertheless, the complications of measles and its after-effects are as frequent and can be as serious as ever they were and protection must be given where it is most needed. Limited stocks of a protective substance against measles are held by most Public Health Laboratories and are available to individual doctors for use under strictly defined conditions. viz. (a) for infants under six months of age who are exposed to the disease and whose mothers have never had measles; and (b) for children under two years exposed to the disease, who are weakly, suffering from some other illness, or living under adverse conditions. Apart from these considerations there is much to be said in favour of having measles reasonably early in life, say at six or seven years.

Pneumonia. The distribution of the cases was as follows:—

	Males					Females					Totals.				
	Quarters				Year	Quarters				Year	Quarters				Year
	I	II	III	IV		I	II	III	IV		I	II	III	IV	
1—2 years		1	1		2						1	1			2
5—6 „				1*	1									1	1
20—30 „	1			1	2						1			1	2
30—40 „				1	1									1	1
40—50 „		1			1						1				1
60—70 „		1		1	2	1		3*	4		2			4	6
70—80 „				2	2	1			1	1				2	3
80—90 „	1			1	2						1			1	2
Totals	2	3	1	7	13	1	1		3	5	3	4	1	10	18

*Two cases of influenzal pneumonia were notified, one in each of these groups.

NOTE: The Pneumonia Notification Rate was 1,840 per million, compared with 728 per million for England and Wales in 1957.

The eighteen cases were distributed widely throughout the district. Eleven localities were affected and in one case the address was not given. Most of the cases occurred in the last quarter, in fact between the last week of October and the end of December, probably in association with the epidemic of Asian 'flu which affected the district during this period. There were only two cases defined as influenzal pneumonia, but it is likely that some of the others were influenced to some extent by the 'flu, especially as they occurred in the localities most affected by the epidemic.

There were no deaths among these notified cases although reference to the section on vital statistics will show that unnotified pneumonia was the main cause of two deaths (both very old persons) and pneumonia was mentioned as a subsidiary cause of two other deaths.

Influenza. The new Asian variant of this disease struck the county with considerable force in the second half of September and in October.

Among several unusual features of this epidemic was its precision. In fact, its character and timing were as accurate as had been forecast in June by officials of the Ministry of Health and the World Health Organisation.

Thought to have had its origin in China, its first impact upon Western Civilization occurred in Hong Kong in mid-April. From this outpost of the West it was traced in quick succession or almost simultaneously to Taiwan, Manila, Japan, Sarawak, North Borneo, Vietnam, Cambodia, Indonesia and India. The attack rate was very high and it was estimated that there had been more than 100,000 cases in Taiwan in the course of two or three weeks. Most of the cases had been described as mild with a duration of one week and the fatality rate was low.

In Montgomeryshire the most noticeable effect was upon the schools, especially the senior schools, where, in some, the attendances dropped to as low as 35-40 per cent of those on the rolls on several days. In the Llanfyllin R.D., however, the effect was less drastic and was confined largely to the Llanfair Caereinion area. The low attendances lasted only about a week or ten days because the over-all rates for this period were not unduly depressed as evidenced by the following figures:—

Schools	Average Percentage School Attendance.			Percentage Deficit (September plus October)
	September, 1956—July 1958 (ex- cluding Sept.-Oct., 1957)	September, 1957	October, 1957	
Llanfair Caereinion				
High School	90·7	78·4	91	12·3
Primary School	94·7	81·8	83·5	24·1
Other County Schools:				
Welshpool				
Secondary				
Modern	90·8	81·8	81·4	18·4
Infants' School	88·57	87	61·1	29
Llanfyllin				
High School	90·97 (May, 1957- April, 1958)	92·9	88·7	2·27

The epidemic in Llanfair Caereinion was shorter, but more accute, in the High School than in the Primary School, and the following weekly figures give the comparisons in this respect.

1957.		Llanfair Caereinion Schools.	
		Average Attendances.	
		High School	Primary School
September:	First Week	88.2	91.4
	Second Week	71.6	81.4
	Third Week	60	77
	Fourth Week	81.4	77.3
October:	First Week	83.6	78.8
	Second Week	91.5	78.4
	Third Week	95	84.4
	Fourth Week	95.2	91.9

Generally speaking, the senior schools were affected a little in advance of the junior schools and it is likely that the apparent high incidence rate for the latter was at least partly, if not entirely, due to the boosting effect of children being kept at home on account of the incapacitation of their parents, and also to some degree to the “protective” withdrawal of children owing to the apprehension regarding Asian ‘flu.

Adults generally were not affected as unhesitatingly as children, and this is supported by the fact that the arrangements made by the Ministry of Health with the local National Insurance Offices were not called into effect. The local N.I. Offices were to inform the Medical Officer of Health when the percentage of sickness benefit claims showed either a 30% increase on the figure for the previous week or an increase of 200% of the average weekly figure during the period 4/4/56—4/12/56. This latter figure of 200% was a new feature of these arrangements.

Reference has already been made to the cases of influenzal pneumonia resulting from this epidemic. It will be noted that only one case occurred within the school age group. There were no deaths which could be clearly attributed to the epidemic, but one was at least suspect. This was the death (in December) caused by coronary heart disease associated with influenza already noted in the vital statistics.

Paratyphoid B. In July a fifteen-year-old boy living in the Llanfechain district was found to be suffering from paratyphoid B and was isolated in hospital for almost four weeks. In subsequent investigations it was discovered that his father was a carrier and he also had to be treated for this condition.

Sixteen laboratory tests were carried out on the case, the carrier and six other family contacts. All were negative except the initial tests on case and carrier, and there were no secondary cases. One of these tests was arranged by courtesy of the Medical Officer of Health for Colwyn Bay. In addition, two special tests were carried out on the Llanfechain sewage disposal works, with negative results.

It is of interest that one of these negative contacts was recorded as a case of paratyphoid fever by my predecessor in his Annual Report for 1936.

Tuberculosis. An analysis of the cases is given below. All the pulmonary cases were admitted to hospital and the appropriate measures were taken regarding disinfection. There were no deaths and each case occurred in a different locality.

	Male.	Age in years.	Female	Age in years.
Pulmonary tuberculosis	2	22 50	1	30
Non-pulmonary tuberculosis	1	4	2	18 16

Mass Miniature Radiography Unit. At a conference in September, 1956, in Wrexham it was confirmed that a new departure in mass miniature radiography routine would be effected in the near future in Wales generally. The main innovation was that the Unit, hitherto entirely mobile, was to become partly static and in 1957 a calendar was widely distributed showing clearly the dates on which it would be available in Oswestry and Welshpool. Twice monthly at first it was found that the response did not merit such frequent visits and these were eventually reduced to between seven and nine in the half-year. This unit provides a valuable service to the community and perhaps it is not yet fully realised by the public for what it is, namely, a simple and confidential examination which involves neither appointments nor undressing.

Tuberculosis Vaccination. Quite a proportion of the cases, perhaps a half or two-thirds, might have been prevented by vaccination. Of course, vaccination, in conjunction with clinical and radiological investigation, is offered to the contacts of these cases where appropriate, but vaccination as a general routine measure was not used during the year. Plans were made, however, to commence a vaccination scheme for schoolchildren in the 13-14 age group in 1958.

Poliomyelitis Vaccination Scheme. The rather meagre supplies of vaccine in 1957 were fairly distributed throughout the County, and by the end of the year 2,334 children had received two inoculations and 421 one inoculation. This represented the complete vaccination of 31% of those registered at that time. The number registered was about 80% of those eligible.

